

1. Write a definition (with pictures, if necessary) for each of the three ways charge is transferred.

Induction

Conduction

Friction

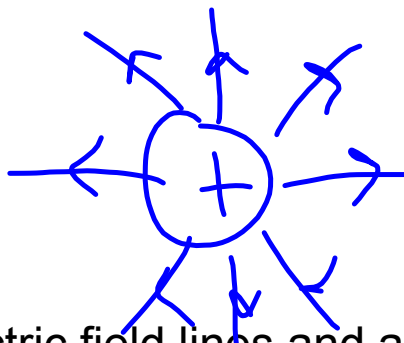
2. What do like charges do when brought close together?

Repel

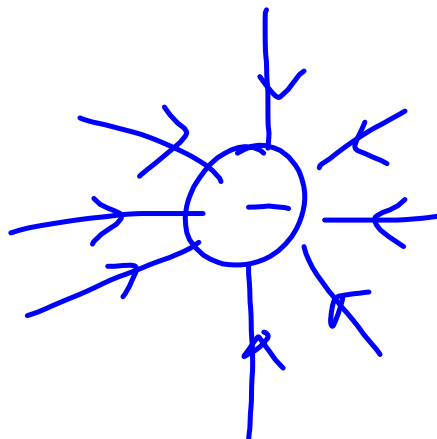
3. What do opposite charges do when brought close together?

attract

4. Draw the electric field lines and arrows for a positive charge.



5. Draw the electric field lines and arrows for a negative charge.



Ohm's Law

Terms:

- Voltage \rightarrow electric potential between
two points

\rightarrow related to electric potential
energy

\rightarrow Units: Volts (V)

- Current \rightarrow flow of e^-

(I) \rightarrow THIS IS WHAT KILLS

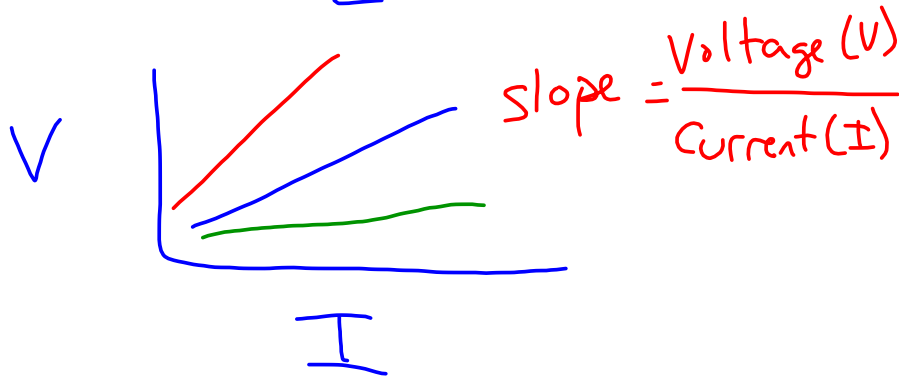
Units: Amperes
(A) 1/6V!

- Resistance \rightarrow opposition to
the flow of electrons

metals \rightarrow low resistance

plastics, air, wood \rightarrow high resistance

- Graph: $V \rightarrow y\text{-axis}$
 $I \rightarrow x\text{-axis}$



Slope \rightarrow Resistivity (or resistance)

Highest $R \rightarrow$ red

Medium $R \rightarrow$ blue

Lowest $R \rightarrow$ green

- Math:

$$\text{Voltage} = (\text{current})(\text{Resistance})$$

$$V = IR$$

units: $V = (A)(\Omega)$

\hookrightarrow Greek letter capital
 omega

\hookrightarrow Ohms